

IN THE CLAIMS

The status of each claim in the present application is listed below.

Claims 1-22: (Canceled).

23. (New) A method of desolvating a polymer solution, comprising:

(a) steam stripping solvent from a polymer solution in an upstream desolvation tank;

(b) steam stripping solvent from the polymer solution in a downstream desolvation tank

wherein

the upstream desolvation tank has a liquid phase portion and a gas phase portion,

downstream desolvation tank has a liquid phase portion and a gas phase portion,

the liquid phase portion of the upstream desolvation tank and the gas phase portion of the downstream desolvation tank are connected by a pipe, and

at least one opening-degree adjusting mean is fixed to the pipe; and

(c) controlling pressures such that a pressure difference ($\Delta P = P_2 - P_1$) between pressure (P_2) of the gas phase portion of the downstream desolvation tank and pressure (P_1) of the gas phase portion of the upstream desolvation tank is larger by from 0.005 to 0.6 MPa than a pressure difference ($\Delta P_0 = P_{20} - P_{10}$) between pressure (P_{20}) of the gas phase portion of the downstream desolvation tank and a pressure (P_{10}) of the gas phase portion of the upstream desolvation tank when the opening-degree adjusting mean is fully opened.

24. (New) The method of Claim 23, wherein the pressure of the gas phase portion of the downstream desolvation tank is in the range from 0.02 to 1 MPaG.

25. (New) The method of Claim 24, wherein the temperature of the liquid phase portion of the downstream desolvation tank is in the range from 100°C to 200°C.

26. (New) The method of Claim 25, wherein the solvent comprises at least one member selected from the group consisting of cyclohexane, cyclopentane, cycloheptane, toluene, benzene, xylene, n-hexane, n-pentane, isopentane, n-heptane, n-octane, n-decane and dichloromethane.

27. (New) The method of Claim 26, wherein the polymer contained in the polymer solution is butadiene rubber, isoprene rubber, styrene-butadiene rubber, styrene· isoprene rubber, ethylene· α -olefin copolymer rubber, ethylene· α -olefin· non-conjugated diene copolymer rubber, butyl rubber, styrene· butadiene· styrene block copolymer, hydrogenated styrene· butadiene· styrene block copolymer, butadiene resin or acrylic resin.

28. (New) The method of Claim 23, wherein the temperature of the liquid phase portion of the downstream desolvation tank is in the range from 100°C to 200°C.

29. (New) The method of Claim 23, wherein the opening-degree adjusting mean is a pressure adjusting valve or an orifice plate.

30. (New) The method of Claim 23, wherein the concentration of the solvent remaining in a solvent-containing polymer to be loaded in the downstream desolvation tank is 10% by mass or less.

31. (New) The method of Claim 23, wherein the polymer solution is continuously supplied and polymer contained in the polymer solution is continuously recovered.

32. (New) The method of Claim 23, wherein the polymer contained in the polymer solution is butadiene rubber, isoprene rubber, styrene-butadiene rubber, styrene· isoprene rubber, ethylene· α -olefin copolymer rubber, ethylene· α -olefin· non-conjugated diene copolymer rubber, butyl rubber, styrene· butadiene· styrene block copolymer, hydrogenated styrene· butadiene· styrene block copolymer, butadiene resin or acrylic resin.

33. (New) The method of Claim 23, wherein the solvent is at least one member selected from the group consisting of cyclohexane, cyclopentane, cycloheptane, toluene, benzene, xylene, n-hexane, n-pentane, isopentane, n-heptane, n-octane, n-decane and dichloromethane.

34. (New) A method of desolvating a polymer solution, comprising:
(a) steam stripping solvent from a polymer solution in an upstream desolvation tank;
(b) steam stripping solvent from the polymer solution in a downstream desolvation tank
wherein
the upstream desolvation tank has a liquid phase portion and a gas phase portion,

downstream desolvation tank has a liquid phase portion and a gas phase portion,

the liquid phase portion of the upstream desolvation tank and the gas phase portion of the downstream desolvation tank are connected by a pipe, and

at least one opening-degree adjusting mean is fixed to the pipe; and

(c) controlling pressures such that a pressure difference ($\Delta P = P_2 - P_1$) between pressure (P_2) of the gas phase portion of the downstream desolvation tank and pressure (P_1) of the gas phase portion of the upstream desolvation tank is 0.036 MPa or larger.

35. (New) The method of Claim 34, wherein the pressure of the gas phase portion of the downstream desolvation tank is in the range from 0.02 to 1 MPaG.

36. (New) The method of Claim 35, wherein the temperature of the liquid phase portion of the downstream desolvation tank is in the range from 100°C to 200°C.

37. (New) The method of Claim 36, wherein the solvent is at least one member selected from the group consisting of cyclohexane, cyclopentane, cycloheptane, toluene, benzene, xylene, n-hexane, n-pentane, isopentane, n-heptane, n-octane, n-decane and dichloromethane.

38. (New) The method of Claim 37, wherein the polymer contained in the polymer solution is butadiene rubber, isoprene rubber, styrene-butadiene rubber, styrene· isoprene rubber, ethylene· α -olefin copolymer rubber, ethylene· α -olefin· non-conjugated diene copolymer rubber, butyl rubber, styrene· butadiene· styrene block copolymer, hydrogenated styrene· butadiene· styrene block copolymer, butadiene resin or acrylic resin.

39. (New) The method of Claim 34, wherein the temperature of the liquid phase portion of the downstream desolvation tank is in the range from 100°C to 200°C.

40. (New) The method of Claim 34, wherein the opening-degree adjusting mean is a pressure adjusting valve or an orifice plate.

41. (New) The method of Claim 34, wherein the concentration of the solvent remaining in a solvent-containing polymer to be loaded in the downstream desolvation tank is 10% by mass or less.

42. (New) The method of Claim 34, wherein the polymer solution is continuously supplied and polymer contained in the polymer solution is continuously recovered.

43. (New) The method of Claim 34, wherein polymer contained in said polymer solution is butadiene rubber, isoprene rubber, styrene-butadiene rubber, styrene·isoprene rubber, ethylene· α -olefin copolymer rubber, ethylene· α -olefin·non-conjugated diene copolymer rubber, butyl rubber, styrene·butadiene·styrene block copolymer, hydrogenated styrene·butadiene·styrene block copolymer, butadiene resin or acrylic resin.

44. (New) The method of Claim 34, wherein the solvent is at least one member selected from the group consisting of cyclohexane, cyclopentane, cycloheptane, toluene, benzene, xylene, n-hexane, n-pentane, isopentane, n-heptane, n-octane, n-decane and dichloromethane.